

Fig 1A

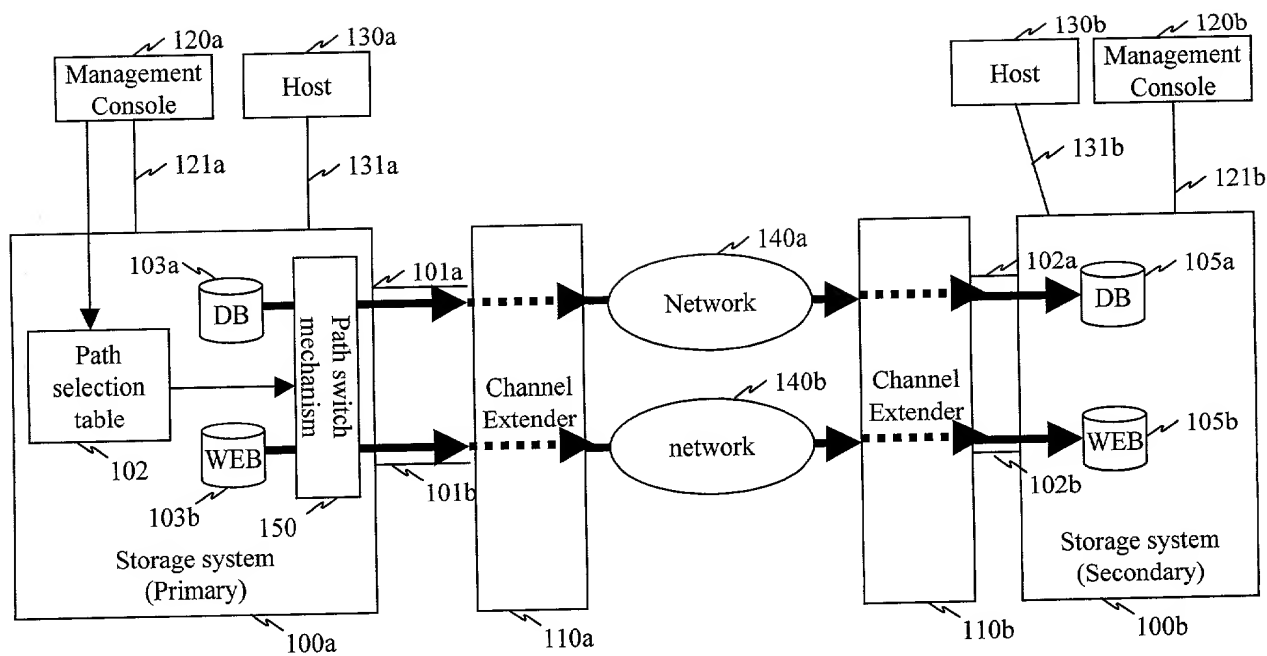


Fig 1B

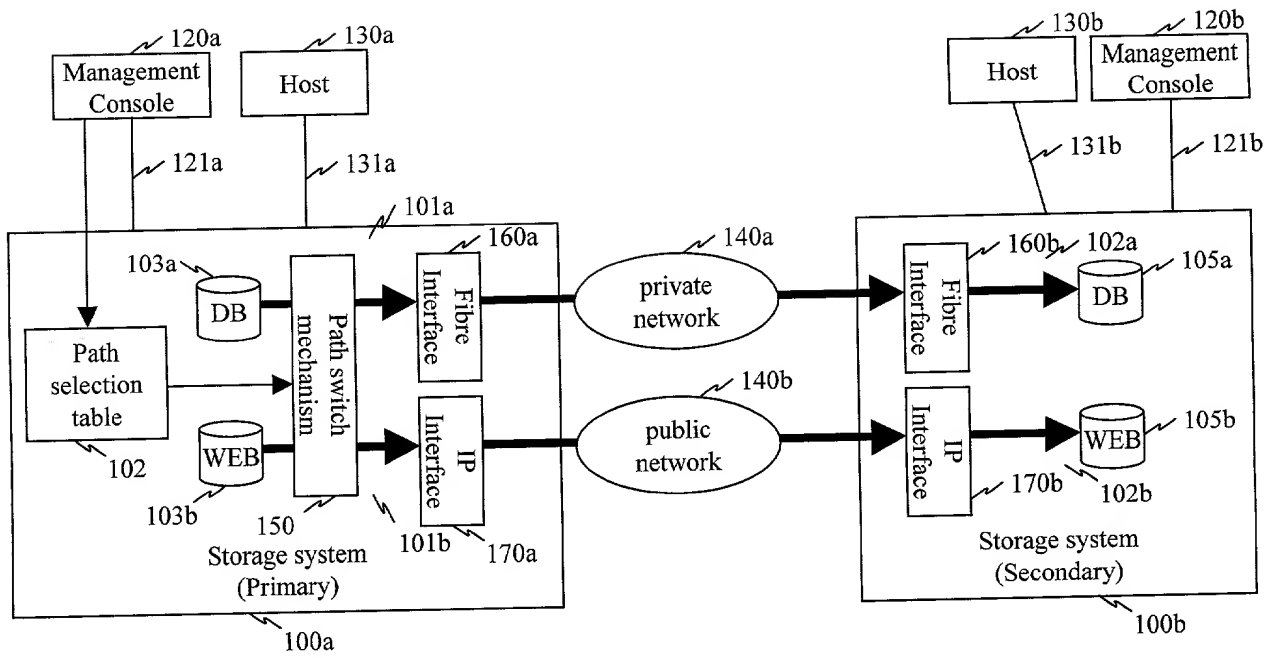


Fig 2

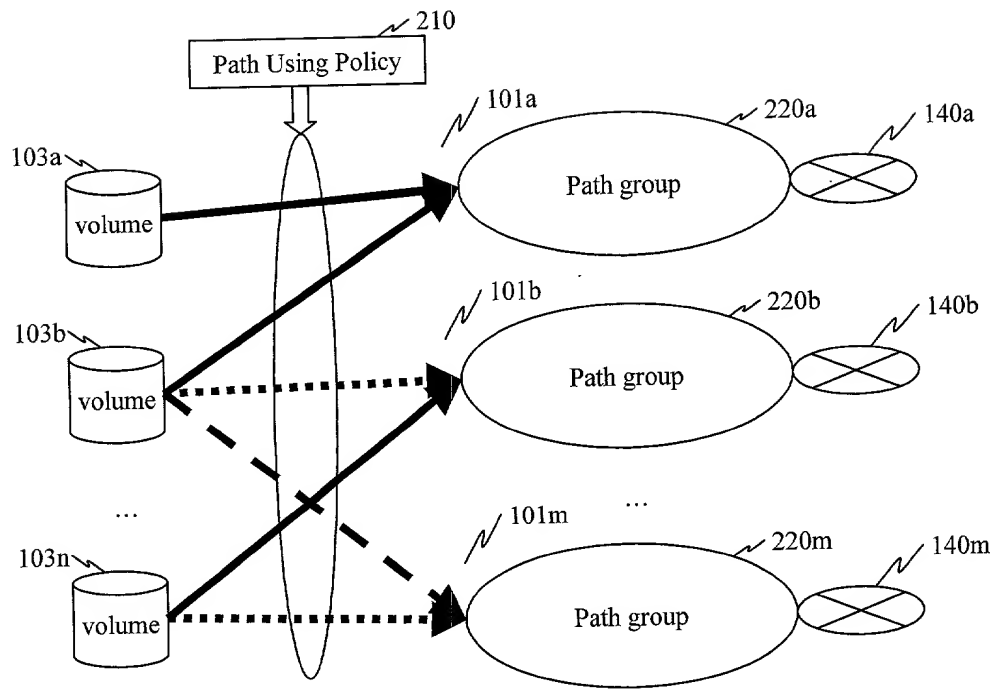


Fig 3 path selection table 300

| 310 Volume number | 320a Path group number | 320b Path group number |
|----------------------|---------------------------|---------------------------|
| 0 | 0 | NULL |
| 1 | 1 | 0 |
| 2 | 0 | NULL |
| 3 | 1 | NULL |
| 4 | 1 | 0 |

Fig 4 path group table 400

| 410 Path group number | 420 Constraint | 440 Status | 430a Remote link number | 430b Remote link number | 430c Remote link number |
|--------------------------|-------------------------|------------------------|----------------------------|----------------------------|----------------------------|
| 0 | Max 5MB/s | Unavailable | 0 | 1 | NULL |
| 1 | 9:00pm to 6:00am only | Available | 2 | 3 | 4 |
| 2 | Busy rate less than 70% | Available | 5 | 6 | NULL |
| 3 | Error rate less than 5% | Temporally Unavailable | 7 | 8 | NULL |
| 4 | Outboard control | Temporally Unavailable | 9 | 10 | 11 |

Fig 5 path selecting algorithm

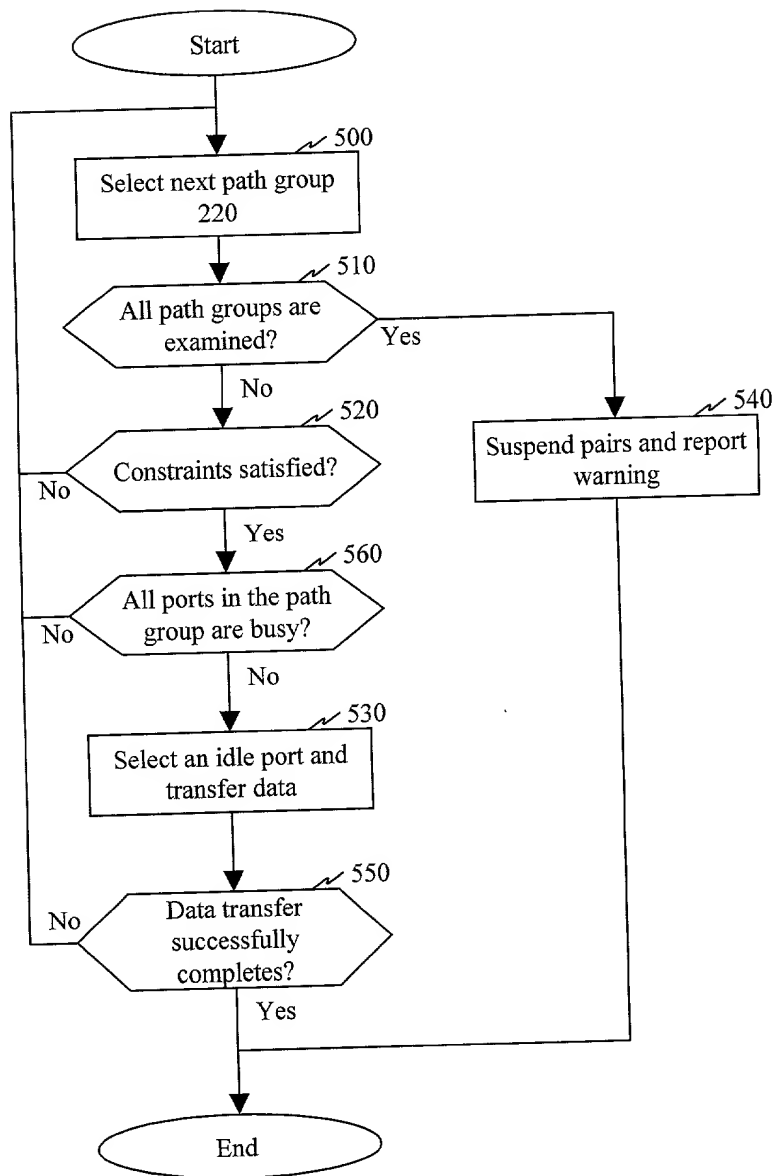


Fig 6 User interface for setting path constraints

610
620
630
640

☐ Juno - SUN Ultra60

☐ /dev/rdisk/c1t1d0
 ☒ /dev/rdisk/c1t2d0

☒ Mars - SUN Ultra450

☒ Jupiter - SUN Ultra450

Storage System Information
 Manufacturer: HITACHI
 Product: HDS9900
 Serial: 0x00421014
 Location: Head quarter (SF)

Device Information
 Device Type: OPEN-3
 Size: 24420 MB

Remote Copy Information
 Pair Status: PAIR

Remote Storage System Information
 Serial: 0x00421025 Location: Development Ce...

Remote Link Information

Path Group:

| | |
|----------------|-----|
| T3 up to 5MB/s | RDY |
| Internet | RDY |
| Extranet | N/A |

Change Path Group Name:

Status:

Constraints:
☒ TP up to 5MB/s

Apply

Close

600

Fig 7 Maximum throughput dialog

Maximum throughput constraints

Selected Path Group: T3 up to 5MB/s

Target Server - Device: Juno - /dev/rdisk/c1t2d0

Maximum Throughput: MB/s

Alarm Options:

E-mail Address:

Phone Number:

Fig 8 Flow chart for using expensive networks below maximum throughput or busy rate

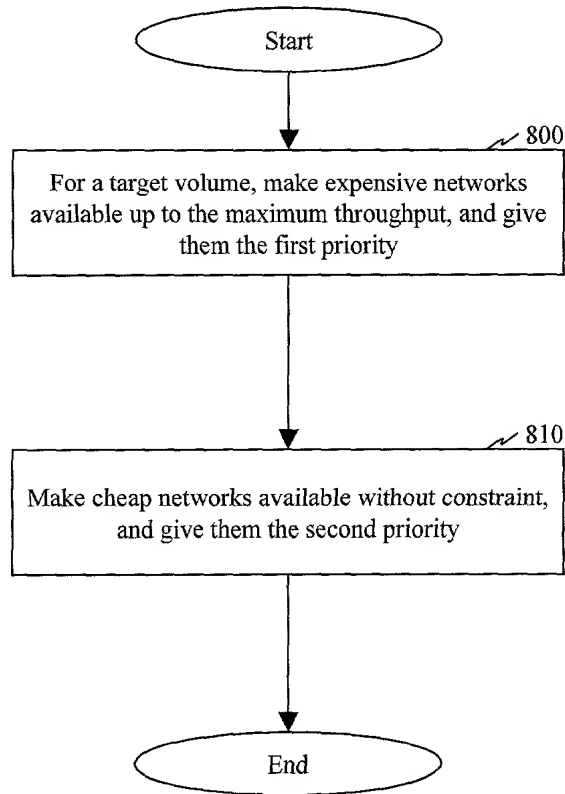


Fig 9 Flow chart for using cheap networks only daytime

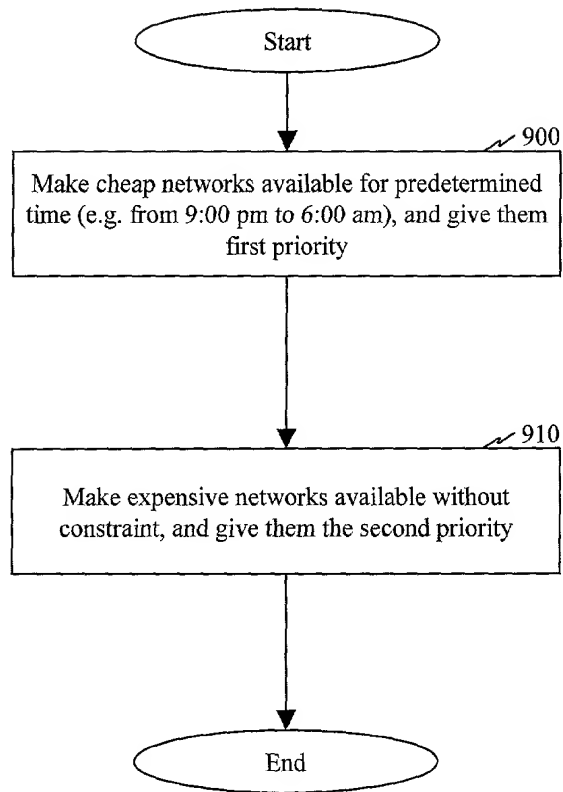


Fig 10 System Configuration with Network Monitor

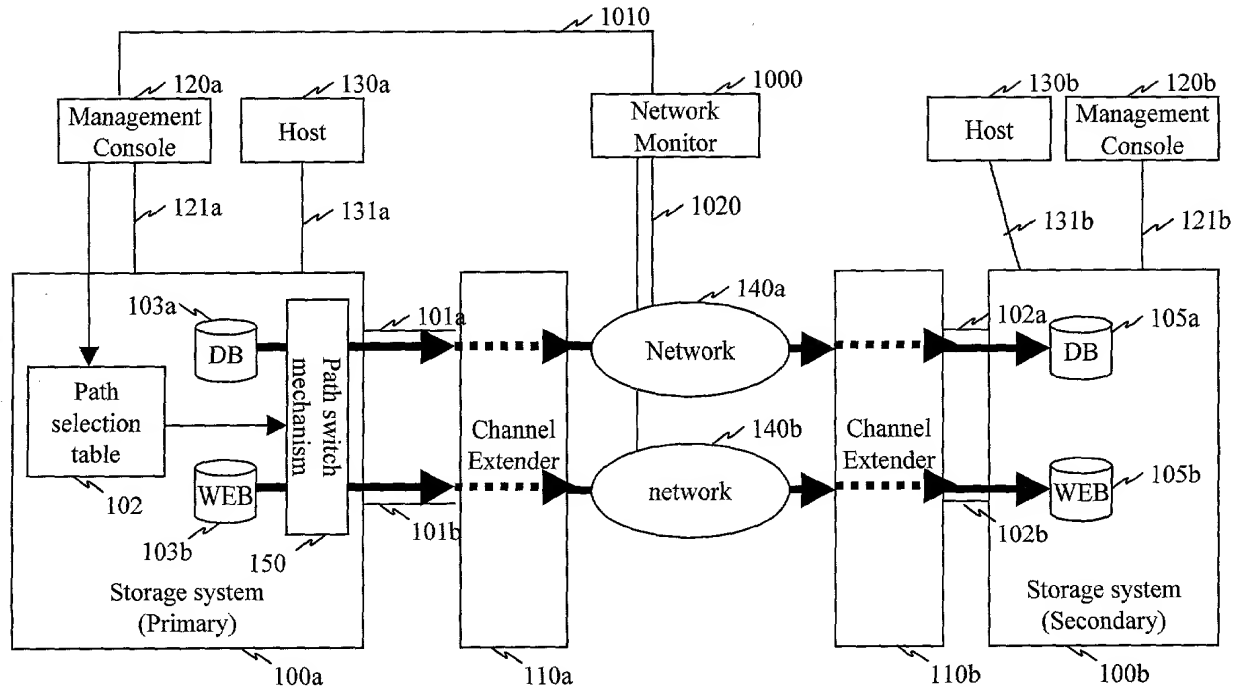


Fig 11 Information sending from Network Monitor to Management Console

| | | |
|-----------------------|--------------------------|------|
| Network Name | Internet | 1100 |
| Warning | Overload (80% busy rate) | 1110 |
| Current Date and Time | 12-12-2000:13:46 | 1120 |

Fig 12 Flowchart for monitoring networks

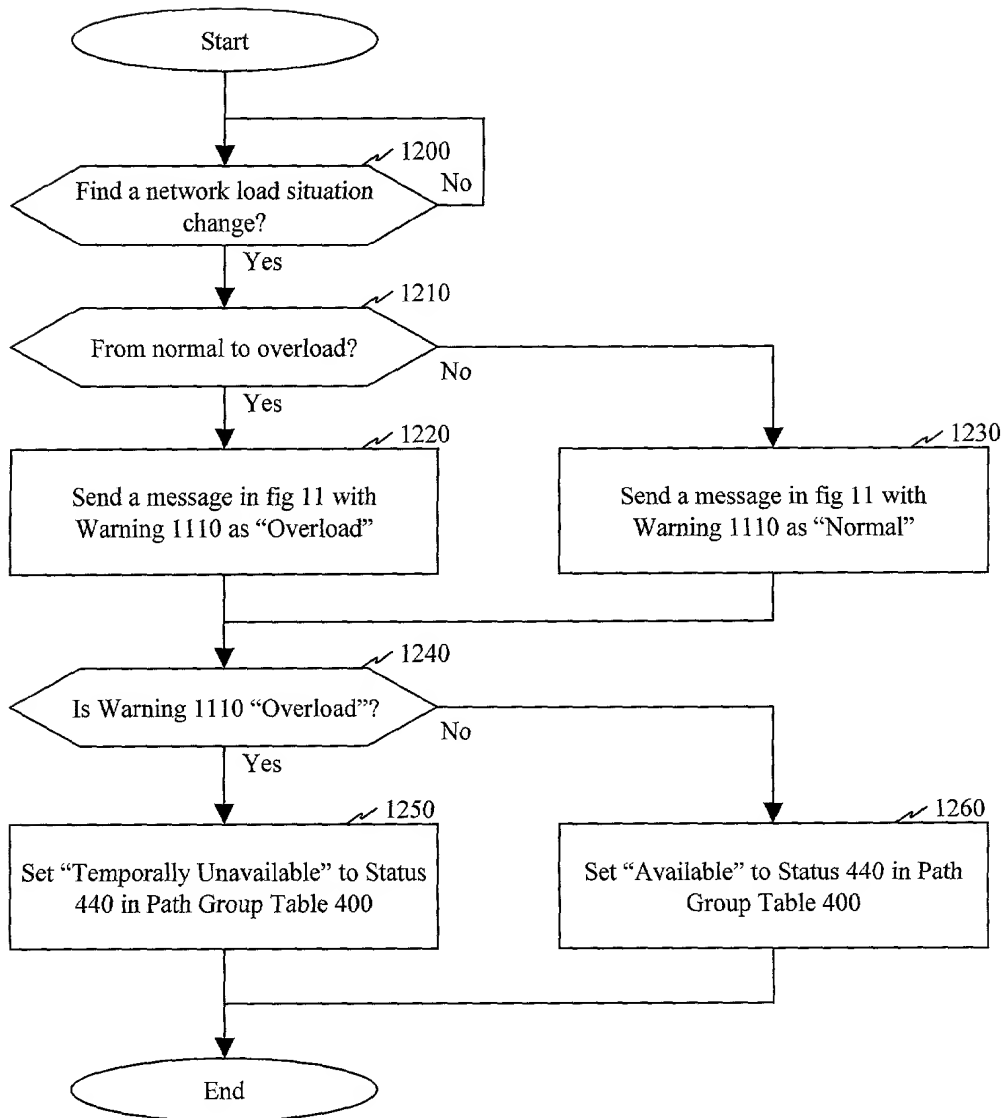


Fig 13 Flow chart for using expensive network only in emergency

